## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of Application by	)		
SES Americom, Inc.	)	SES-LIC	 
Request to Add an Antenna to the South Mountain	)		
Earth Station to Communicate with the WAAS	)		
Payload on SES-15 at 129.15° W.L.	)		

## EARTH STATION APPLICATION

By this application, SES Americom, Inc. ("SES Americom") respectfully requests authority for a new antenna at its South Mountain teleport located in Somis, California. The antenna will communicate with the Wide Area Augmentation System ("WAAS") payload on the SES-15 satellite to be operated by SES Satellites (Gibraltar) Ltd. ("SES-GIB") at 129.15° W.L.<sup>1</sup>

The WAAS payload on SES-15 is part of a program managed by the Federal Aviation Administration ("FAA").<sup>2</sup> Data from the WAAS payload will be delivered to WAAS-enabled GPS receivers and used to correct the measured GPS position. The WAAS broadcast message increases GPS signal accuracy from 100 meters to less than 7 meters. The FAA provides this service because it improves the ability of GPS-enabled aircraft to make precision

<sup>&</sup>lt;sup>1</sup> See File Number SAT-MPL-20160718-00063, filed July 18, 2016 ("SES-15 WAAS Modification"). SES Americom incorporates by reference the satellite technical information SES GIB submitted in its application for market access for the payload.

Raytheon Integrated Defense Systems ("Raytheon") administers the WAAS network under an agreement with the FAA. Last year Raytheon entered into a subcontract with SES Government Solutions, Inc. ("SES-GS"), an affiliate of SES Gibraltar, for the WAAS payload to be deployed on SES-15. *See* http://www.ses-gs.com/featured/ses-host-waas-payload-ses-15/.

landings and enhances flight safety. The SES-15 WAAS payload will supplement the network of WAAS-equipped satellites that have previously been authorized by the Commission.<sup>3</sup>

The earth station requested in this application will be used as a GEO Uplink Subsystem/Ground Uplink Station ("GUS") and will transmit the WAAS signal to the satellite using the extended C-band frequencies. The data will then be relayed to GPS receivers using Lband GPS frequencies.

In the SES-15 WAAS Modification, SES GIB also requested several waivers in order to operate the WAAS payload frequencies in the United States. To the extent similar waivers are required to operate the requested earth station with SES-15, SES Americom incorporates the information provided in the SES-15 Modification.

For the foregoing reasons, SES Americom respectfully requests that the Commission authorize the requested earth station to communicate with the SES-15 WAAS payload.

> Respectfully submitted, SES Americom, Inc.

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Dated: July 22, 2016

These include Intelsat's Galaxy 15 at 133° W.L., Telesat's Anik F1R at 107.3° W.L., and Inmarsat 4F3 at 98° W.L., as well as the payload on the recently launched Eutelsat Americas Eutelsat 117 West B (formerly Satmex 9) satellite to be positioned at 116.8° W.L.